ON05621

92-06379/

155 COLLEGE ST

Scope

RESEARCH SECTION
LIBRARY SERVICES DEPARTMENT
TORONTO BOARD OF EDUCATION

VOLUME 5
NUMBER 1

JANUARY 1990

A Holistic Approach to Evaluation: An Example from the Visual Arts

Introduction

In recent years, more and more educators have begun to question the use of standardized testing as a means of evaluating students' achievement. Critics of standardized tests find this evaluation method too closed-ended and product-oriented; they believe that it fails to comprehend students' learning processes and to deal with more complex thinking such as problem solving and reasoning. As a result, the call for a more qualitative and holistic approach as an alternative mode of evaluation has been growing. Some examples of qualitative evaluation methods are classroom observations, peer and self-assessment, and collection of work samples.[1]

In this article, we shall illustrate some of these holistic methods by using the example of a new arts assessment mechanism recently developed by a group of arts educators and researchers. Although the example is from a single discipline, the approaches discussed can also be applied in many other subject areas.

Assessment in the Visual Arts

Assessment of students' achievement in the visual arts has been traditionally conducted by either evaluating the students' finished work and/or by testing their knowledge of arts (e.g. art history, and principles of design). While these two means of assessment have their own value as being simple and efficient, some art educators are highly critical of the approaches and find them too narrow and outcome-oriented (Gardner, 1987; Hablen, 1987 & 1988; Wolfe, 1987-88; Brandt, 1987-88). They hold that neither written tests nor final products are sufficient to provide a full picture of a student's real ability in arts. Instead, they call for more substantive and qualitative modes of assessment which will encompass different aspects of students' learning and performance in arts.

A group of researchers from Harvard Project Zero and Educational Testing Service are among those who advocate a more holistic approach to arts assessment. These researchers have worked closely with the arts teachers from the Pittsburgh public school system in a five-year large-scale assessment project called ARTS PROPEL.[2] Their goal is to devise new methods of assessing (junior and senior high school) students' achievement in three areas of artistic learning: imaginative writing, music, and visual arts. In this article, we shall focus on the area of visual arts.

Arts Propel's Philosophy and Ministry Guidelines

Three basic premises underlie the ARTS PROPEL philosophy of arts assessment.

1. Assessment in the arts should not be restricted to the evaluation of final products; it should also include an appraisal of the process by which students develop their artistic learning - for example, how students formulate new questions, generate ideas, pursue work over time, and arrive at their final products.

2. The emphasis in arts learning as well as evaluation should not be on production alone; it should also include perception (e.g. ability to discern distinctions and connections within an art form) and reflection (e.g. ability to step back and be aware of one's own learning process and the quality of one's own work); and these two elements should not be divorced from production.

3. Finally, the assessment process should not be an end in itself. It should have its instructional and learning value for both teachers and students.

These three premises are consonant with the latest Ontario Ministry of Education curriculum guidelines in visual arts (1986), which state that:

> Evaluation should be an integral part of the learning process and should examine the following:
> -students' growth and progress in the processes of perceiving, producing, and appreciating, and the development of the students' knowledge and understanding as an integral part and outcome of the total learning experience; ....
>
> As an integral and complex part of the teaching-learning process, assessment in the visual arts should be constant and ongoing. It should be positive, concerned with the promotion of student growth and development and the provision of effective learning

1. The Benchmark Program launched by the Toronto Board of Education is one such endeavour.

2. The project began in 1985.

> experiences.... In evaluation, consideration should be given to the growth and development of students' perceptions, the quality of their products, and the appreciation that each student has of his/her own work and that of others. The ultimate aim of the evaluation process should be the development of self-evaluation, self-discipline, and self-actualization in students. (Ontario Ministry of Education, 1986, p.31.)

It is important to note that while the examples that follow are specific to the visual arts, the premises discussed above are applicable to virtually any subject areas. Concerns for process, reflection and formative assessment pervade most course guidelines and are recommended practice for all educators. The very same concerns are basic, for example, to the way writing is taught - such as emphasis on discussion, reflection and revision.

Arts Propel Assessment Methods

Arts Propel has come up with two major assessment instruments in evaluating students' visual arts learning: namely domain projects and portfolios.

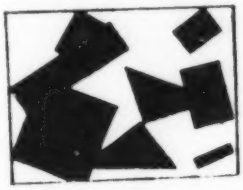
Domain Projects

Domain projects are specially designed class exercises with two functions: to provide learning exercises for students, and to offer a vehicle for teachers to assess their students' artistic skills and learning development. The domain projects that Arts Propel proposed have three important characteristics. First, each domain project pertains to a specific issue, topic, question, approach or technique within a particular art domain. For example, in the domain of art design, composition can be a project topic, and colour co-ordination can be another. Each domain can thus entail a series of projects covering a range of topics, skills, or approaches that are essential to the domain in question. In addition to focusing on a clearly defined topic, each project should last for several class sessions. The idea is to ensure that the exercise is long enough for students to engage in and to appreciate an issue or a technique from different perspectives. Thirdly, it is important that each domain project should give students an opportunity to exercise the three artistic learning components - production, perception and reflection.

To illustrate this, let us examine a domain project recently developed by the ARTS PROPEL group called "The Composition Domain Project" (Portfolio, 1988; Gardner, 1989). Basically it is a collage exercise with the dual purposes of introducing compositional skills[3] to students and allowing teachers to assess how each student develop this particular technique during the project. This composition project consists of three sessions, each with a specific emphasis.

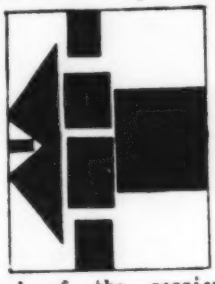
Session One: major emphasis on experimentation and production

1. Each student is asked to randomly arrange a set of shapes on a page without any special considerations. (See figure below.)



2. The student is then asked to examine the random composition and see how he/she could improve it.

3. The student re-creates the composition using a new but identical set of shapes. (See figure below.)



4. At the end of the session, students answer questions regarding their decisions and the process involved in changing the original composition.

Session Two: major emphasis on perception

1. This time, the student is asked to observe and discuss his/her last composition "intelligently" - e.g. why the work is interesting or boring, pleasing or disturbing.

2. The teacher introduces the basic design principles - e.g. harmony, cohesion, balance, tension, etc. - in the context of the students' own works.

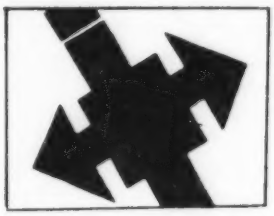
3. The teacher then shows examples of different recognized artists.
The teacher stimulates the student to make discriminations among the various artists' samples and to think about the differences between his/her own work and those of the artists.

3. For example, how arrangements and interrelationships of shapes affect a compositional design.

Session Three: major emphasis on reflection

1. With previous knowledge of the design principles and the real artists' examples, the student is asked to step back and think about how his/her previous composition could be improved further.

2. The student then uses a third, but again identical, set of shapes to re-create the work with new perspectives and knowledge. (See figure below.)



3. The student is then to compare the three compositions and evaluate his/her own progress.

4. At the end of the session, the student is asked to reflect aloud on what he/she has learnt over the three sessions.

It is important that each production, revision or refinement is done as a separate piece, and that the various phases of the work are saved in a sketchbook. In addition, in each session, students are asked to document their own reflections, the rationale for their successive designs, others' comments, new vocabulary, and other pertinent information in the sketchbook.

Of course, certain aspects or tasks of this Composition Domain Project can be modified to suit the needs of the class. However, the basic structure of the project should remain the same - i.e. allowing students to engage in and experience a problem through actual production, before discussing such issues as "historical context, aesthetics, and principles", and having students "reflect about what they are doing". (Portfolio, 1988, p.6.)

As a result of the project, students can acquire compositional skills through the experience of actual production, perception, and reflection. More importantly, with multiple sessions, students could concentrate on a specific technique, deepen their understanding, and thereby appreciate how successful artists solve compositional problems.

The development of a sketchbook is also beneficial to students in terms of self evaluation or reflection. With the different phases of their own work before them, students can observe the changes throughout the process. Furthermore, being aware of their own skills in each of the dimensions, students could eventually think about their own changes either in specific areas or in the range of their own work.

With regard to assessment, there are two mechanisms through which teachers can evaluate their students' performance. The first is the question-and-answer periods at the end of the class sessions. During discussion, teachers can observe their students' plans, intentions and the decisions behind their work - elements that are crucial for understanding the development of one's work, but are hardly discernible in the piece itself. "Only if we know what students plan to do, and what they feel they have achieved, do we feel we can fully assess a product." (Portfolio, p.4) Also during the question-and-answer periods, teachers can detect their students' perceptive and reflective skills - how they see artistic work critically, and how they evaluate their own performance.

Another assessment mechanism in domain projects is the student's sketchbook. By studying a student's successive compositions, teachers can gauge the way the student pursues his/her artistic ideas at different stages within the project - i.e. how the student's artistic ideas unfold from the initial conception to the different stages of refinement as a result of the various sources of input - design principles, examples of acknowledged artists' work, others' comments, self-reflection, etc.

In sum, domain projects allow teachers to gather samples of students' works which are "large and deep enough" for them

- to assess their students' skill on a particular dimension, approach or technique within an art domain;
- to form an accurate picture of how individual students progress along each of the dimensions; and
- to develop a sense of individual students' strengths and weaknesses.

Portfolios

While domain projects allow teachers to evaluate their students' ability in specific skills or tasks, they fall short of providing an overall portrait of the students' long-term artistic development over time. Hence, according to ARTS PROPEL, it is important to complement domain projects with another assessment instrument called portfolios.

The portfolio in this case is not merely a collection of exemplary works of a student. In ARTS PROPEL, a portfolio is supposed to be a record of a student's "longer term evolution ... of artistic thinking." (Wolfe, 1987/88, p.27.) Hence, a student's portfolio should contain (i) a chronological sample of finished works, and (ii) the biographies of associated works. The biography of a work is a documentation of the genesis of a work, which consists of initial and successive sketches (including abandoned ideas), critiques and suggestions

made by others, evaluations and other notes by the student, samples of works by others which are relevant to the project, future plans, etc. In fact, having students write about their work is an excellent example of implementation of the Toronto Board's Language-across-the-curriculum policy, which recognizes that reading, writing and speaking should be integral to learning in all subject areas.

At the end of a semester, students can be asked to page through the materials in their portfolios, and reflect upon the body of their work - "form a picture of what has developed, how it came into being, where difficulties remain, and directions for future work." (Wolfe, 1987/88, p.28.) At this time, teachers can assess just how self-aware students are of their own strengths and weaknesses.

According to Arts Propel, the very process of forming such a portfolio makes students more thoughtful about and involved with their work. It also fosters perception and reflection skills. In addition, a review of their own portfolios at the end of a semester may further reinforce their self evaluation skills.

As far as assessment is concerned, a portfolio can be considered as a means of putting domain project assessment in perspective. By studying the chronological samples of work and their associated biographies, teachers can gain insight into a student's long-term performance. Specifically, by examining the portfolios, teachers can observe:

- how the kinds of skills identified in domain projects are brought together in a student's own work;
- what different processes a student has mastered or failed to grasp;
- how a student's particular profile of skills transforms or improves over time;
- how many different sources of information a student draws on in improving his/her work;
- whether ideas or skills persist or change over time;
- whether a student works consistently or sporadically; and
- when a work has deepened, rather than simply changed.

Conclusion

It is clear that both domain projects and portfolios are far from being simple and efficient assessment procedures. This is because the aim of these holistic modes of assessment is not only to gain knowledge of the products and achievement but also of the process and learning. The learning, instructional and assessment value that students and teachers can gain from the process far outweighs the complexity and the time involved.

For instance, not only do students learn the production skills in arts, but they can also develop perceptive and reflective skills in relation to their work. Furthermore, through domain projects and portfolios, students are given the opportunity to get deeply interested in and involved in pursuing their artistic ideas and skills. At the same time, as a result of these two modes of assessment, teachers gain insight into students' problem-solving and thinking process, their development of self-awareness and standards, and their individual profiles of skills. With this knowledge, teachers can reflect on what subsequent steps to take in order to bring their students to greater skill and understanding.

Finally, it should be re-emphasized that these arts assessment techniques - domain projects and portfolios - need not be confined to artistic learning. The similarity to students' writing folders is obvious. According to Arts Propel, the basic concept and approaches can also be applied to other areas such as natural and social sciences. It is believed that in all areas of learning, students' achievement increases as they sharpen their perceptions and focus reflectively on what they have learned. Correspondingly, teachers in all subject areas can increase the reliability and the utility of their assessment of students' work (and of their own program) by being able to "see" the thinking process involved, and the development of their students' abilities and comprehension over time.

References

ARTS PROPEL. (undated). An Introduction to Arts Propel.

Brandt, R. (1987-88). On assessment in the arts: A conversation with Howard Gardner. Educational Leadership, pp. 30-34.

Brandt, R. (1987-88). On discipline-based art education: A conversation with Elliot Eisner. Educational Leadership, pp. 6-9.

Gardner, H. (1987). Beyond the IQ: Education and human development. Harvard Educational Review, Vol. 57, No. 2, pp. 187-195.

Gardner, H. (1989). Zero-based arts education: An introduction to ARTS PROPEL. Studies in Art Education. Vol. 30, No. 2.

Hamblen, K.A. (1988). If it is to be tested, it will be taught: A rationale worthy of examination. Art Education, pp. 59-62.

Hamblen, K.A. (1987). What general education can tell us about evaluation in art. Art Education, pp. 246-250.

Harvard Graduate School of Education. (1988). Learning from the Arts. The Harvard Educational Letter. Vol. IV, No. 5.

Metropolitan School Board. (1987). OAC Visual Arts.

Ontario Ministry of Education. (1986). Curriculum Guideline Visual Arts (Intermediate & Senior Levels).

Portfolio (ARTS PROPEL newsletter). (1988). Vol. 1, No. 3.

Wolf, D.P. (1987/1988). Opening up assessment. Educational Leadership, pp. 24-29.

MARIA YAU, Research Officer